

INDEX OF SURGICAL PROGRESS.

CHEST AND ABDOMEN.

I. Statistical Investigations on the Etiology of Mammary Cancer. By DR. H. SCHULTHESS. The mortality from this disease in the Canton of Zurich, 53 specially observed cases, and a comparison from the general literature of the subject, are made the basis for exhaustive study. His conclusions are:

FREQUENCY.—Of 1,000 persons, 23 die from cancer of the breast. Of 100 females over 40 years of age, 1 dies from this cause.

SEX.—This has the most important influence, as 98% of all patients are females, while 1.39% are males.

AGE.—In women the disposition hereto increases from the development of the sexual organs—before which it is nil—with the age, a special frequency being noticeable about the time of the menopause. In males the material at hand is too small to warrant any statement.

INFLUENCE OF SEXUAL ACTIVITY IN THE WOMEN.—(a) Menstruation—No influence can be shown, for want of comparative material.

(b) Sexual intercourse.—Its frequency is without significance.

(c) Gravidity.—Neither this of itself nor its frequency is in general of any importance, though there are rare cases in which it certainly represents an etiological factor.

(d) Lactation.—Of itself this is indifferent as regards the later development of malignant neoplasms.

FORMER DISEASES OF THE MAMMA AS ETIOLOGICAL FACTORS.—(a) Mastitis.—If any factor can certainly be made responsible, it is puerperal mastitis; this plays a part in 14% of all patients, or in 28% of those who have borne children. In the cases where cancer attacked the gland that had escaped inflammation, or only one mamma where both had had mastitis, we must assume an unknown factor of greater

importance than belongs to the mastitis. Perhaps in these cases we may fall back on congenital tumor rudiments in Cohnheim's sense.

(b) Eczema appears, according to English authors, to stand in direct connection with cancer of the mamma. Our cases suggest at the most a *locus minoris resistentiae*.

TRAUMATIC EFFECTS.—(a) A single intense trauma was found to be an etiological factor in $12\frac{1}{2}\%$. This was specially evident in men.

(b) Repeated injuries, each slight in itself, such as happen in house and farm work, and in many callings, now and then, perhaps, from poorly fitting garments, probably have an influence in disposed persons, and under certain conditions that we do not further understand. At any rate we are not justified in attributing cases, where no other etiological factor is present, simply to small mechanical insults as an independent factor.

SIDE OF THE BODY.—This has absolutely no importance. Males as well as females show an equal frequency on the two sides.

LOCALIZATION IN THE MAMMA.—The point of predilection for the beginning cancer is the upper outer quadrant; the region of the nipple and the areola appears to be a favorite seat of the same.

HEREDITY.—Ten per cent of the cases are said to be hereditarily handicapped. Still, on comparing herewith the mortality statistics of cancer, this can only be allowed in cases of repeated cancer in the family, while in other cases it is at least doubtful.

The individual disposition to disease and the general condition of the patient can not be estimated statistically. It appears that there is no uniform etiology for mammary cancer. For a large number, the majority, of patients we do not know whence the neoplasm comes.—*Brun's Beitrage z. klin. Chirg.*, 1889, Bd. iv, heft 3.

II. By What Means Can the Occurrence of Pseudo-Membranous Adhesions From Intra-Peritoneal Wounds Be Prevented? By DR. R. STERN (Heidelberg). Although septic peritonitis is the most frequent cause of death after laparotomy, other unfavorable results occur to all operators, quite independent of any infection. Amongst these latter occurrences intestinal occlusion plays